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Likewise, the capacitors 56 and 64 may be switched to the supply voltage and may be used as decoupling capacitors on the voltage supply in one embodiment. This decoupling may reduce supply noise. In addition, without the feedback 55, current may pass through the diode/capacitor 56 combination in the circuit 44. This current may increase the power consumption under supply noise. By shorting the diode connected transistor 58, this power consumption may be reduced.

The use of two threshold voltage activation circuits 40 may, in some embodiments, make it less likely that the latching starts prior to the time when the logic is operational (one threshold voltage). In addition, the charging capacitors 56 and 64 are typically used for the power-on reset application only. In the embodiment shown in Figures 5 through 8, the capacitors 56 and 64 may also be used for supply decoupling. Therefore, the same component may be utilized for two different purposes, reducing layout overhead, in some embodiments.

While the present invention has been described with respect to a limited number of embodiments, those skilled in the art will appreciate numerous modifications and variations therefrom. It is intended that the appended claims cover all such modifications and variations as fall within the true spirit and scope of this present invention.

What is claimed is: